

Special keys

tel Waiting

FA Autopage toggle	1Z Symbolic dump
FE R/R command	
DEL Delete backwards	ESC Interrupt
RET Escute command	

tel Editing

1B Beginning	1R New file
1C Cursor to corner	1R Cursor right
1D Cursor down	1S Split line
1E Cursor to end	1T Turn back
1G Go on	1U Cursor up
1H Help	1X Erase char
1K Delete line	1Z Cancel session
1L Cursor left	
DEL Delete backwards	ESC End session
RET Cursor to next line	

Special symbols

< >	dynamic list
{ }	expression grouping
#	list pointer
[]	static list
:	variable value
^	in command line, Control key

Abbreviations and alternative names

BO	= BACKWARD
CL	= CLEAR
CENTER	= CENTRE
CT	= CONTR
DIV	= DIVIDE
EMQ	= EMPTY
EQD	= EQUALD
ERASE	= RUBBER
FO	= FORWARD
GEO	= SPEAKERSOUND
GRG	= GREATER
INITIALIZE	= INITIALISE
INT	= INITIALISE
LEG	= LESSORALS
LO	= LEFT
LSQ	= LESSQ
LT	= LEFT
MUL	= MULTIPLY
NO	= NUMBER
PP	= PUTRIGHT
PL	= PUTLAST
RT	= RIGHT
SUB	= SUBTRACT
WG	= WORD
ZQ	= ZEROQ

Screen size

0 to x 0 y 0 to y 0

Headings

0 is to the right,
increases anti-clockwise

Colors

Pencil 0 background
Pencil 1: white
Pencil 2: red
Pencil 3: green

```
*****
*                                     *
*  RESEARCH MACHINES               *
*  LOGO                             *
*  REFERENCE                         *
*  CARD                             *
*                                     *
*****
```

Start-up arguments

Screen Command file
-M ignore message file
+PA Anadex printer
-N News on/off

Files

LOGO.COM	Logo language
NEWSLOG	News
ERRMSGLOG	Long error messages
CONFIGLOG	Configuration file
anythingLOP	Logo programs
anythingLOG	Logo command file
anythingBAK	Back-up copy of LOGO programs
anythingSB	Intermediate file

Recovery of accidentally changed file

- Give the command GOODBYE
- Tell CP/M:
- ERA nameLOP
- REN nameLOPnameBAK

Primitives

ADD	<i>n n</i>	<i>no n</i>
<i>a</i> AND <i>a</i>		
ARC4	<i>n n</i>	
ARCH	<i>n n</i>	
ARR	<i>n</i>	<i>no f</i>
BACKWARD	<i>n</i>	
BOTH	<i>f f</i>	<i>no f</i>
BUG	<i>no</i>	
BUILD	<i>n</i>	
CENTRE		
CHANGE	<i>n</i>	
CLEAR		
COPY	<i>pl</i>	
COS	<i>n</i>	<i>no n</i>
COUNT	<i>n</i>	<i>no n</i>
DECIMALS	<i>f</i>	
DEK	<i>no</i>	
DIVIDE	<i>n n</i>	<i>no n</i>
DO <i>a</i> UNTIL <i>f</i>		
DRAWING		
EDGES		
ETTERA	<i>f f</i>	<i>no f</i>
EMPTY	<i>n</i>	<i>no f</i>
EQUAL	<i>n n</i>	<i>no f</i>
ESCAPE		
FAST		
FILENAME	<i>no</i>	
FILES		
FIRST	<i>no</i>	<i>no no</i>
FORWARD	<i>n</i>	
GET	<i>pl</i>	
GOODBYE		
GREATEREQUAL	<i>no no</i>	<i>no f</i>
GREATER	<i>no no</i>	<i>no f</i>
HIDE		
IF <i>f</i> THEN <i>a</i>		
IF <i>f</i> THEN <i>a</i> ELSE <i>a</i>		
(IF <i>f</i> THEN <i>a</i> ELSE <i>a</i>)		<i>no n</i>
INDEX		
INSPECT	<i>n</i>	
JOIN	<i>no no</i>	<i>no no</i>
KEEP	<i>pl</i>	
KEY	<i>no no</i>	
KEYQ		<i>no f</i>

LABEL	<i>n</i>	
LEFT	<i>n</i>	
LESSOREQUAL	<i>no no</i>	<i>no f</i>
LESS	<i>no no</i>	<i>no f</i>
LIFT		
LISTQ	<i>n</i>	<i>no f</i>
LOSE	<i>pl</i>	
MAKE	<i>n n</i>	
MAKE	<i>n n f a</i>	
MS.		
MULTIPLY	<i>n n</i>	<i>no n</i>
NEW	<i>no</i>	
NOEDGES		
NOT	<i>f</i>	<i>no f</i>
NUMBERSQ	<i>n</i>	<i>no f</i>
PAUSE	<i>n</i>	
PENCIL	<i>f</i>	
PICK	<i>f</i>	<i>no f</i>
PICTURE		
PRINT	<i>n</i>	
PROCEDURES		
PURKIST	<i>n f</i>	<i>no f</i>
PURKIST	<i>f n</i>	<i>no f</i>
RANDOM	<i>no n</i>	
REM	<i>no n</i>	<i>no n</i>
REPEAT	<i>f n</i>	
REST	<i>no</i>	<i>no no</i>
RESTORE		
RESULT	<i>n</i>	
REVEAL		
RIGHT	<i>n</i>	
RUNNER		
RUN	<i>n (n...)</i>	
SAY	<i>f</i>	
SCRAP	<i>pl</i>	
SETH	<i>n</i>	
SETA	<i>n</i>	
SETY	<i>n</i>	
SHARE	<i>n n</i>	<i>no n</i>
SH	<i>n</i>	<i>no n</i>
SLOW		
SOT	<i>n</i>	<i>no n</i>
STOP		
SUBTRACT	<i>n n</i>	<i>no n</i>

TAN	<i>n</i>	<i>no n</i>
TEPSE		
TEXT		
TRACE	<i>pl</i>	
UNBUG	<i>no</i>	
UNEQUAL	<i>n n</i>	<i>no f</i>
UNTRACE	<i>pl</i>	
UNWALK	<i>pl</i>	
VALUE	<i>n</i>	<i>no n</i>
VERBOSE		
WALK	<i>pl</i>	
WREPE		<i>no f</i>
WYLE	<i>f n</i>	
WPE		
WORDQ	<i>n</i>	<i>no f</i>
WON	<i>f f</i>	<i>no f</i>
ZEROQ	<i>n</i>	<i>no f</i>

Abbreviations

no returns result

<i>a</i>	command
<i>f</i>	integer
<i>f</i>	list
<i>n</i>	procedure name
<i>n</i>	number
<i>f</i>	"true" or "false"
<i>n</i>	variable name
<i>n</i>	word
<i>n</i>	anything
<i>no</i>	number or word
<i>pl</i>	procedure name or list of procedure names
<i>no</i>	variable name or list of variable names
<i>no</i>	word or list